

Desktop Class Spinpoint F2EG



Capacity		500 GB	1 TB	1.5 TB
Model	16MB	HD502HI	HD102SI	HD153UI
	32MB		HD103SI	HD154UI

FEATURES

- MAX.500GB Formatted Capacity Per Disk
- Serial ATA 3.0Gbps Interface Support
- Improved recording stability over temperature with PMR
- Advanced dynamic FOD control for best data integrity
- Intelligent compensation of external disturbance
- SATA Native Command Queuing Feature
- Device Initiated SATA Power Management
- Rotational vibration sensor
- Environment friendly product with RoHS compliance
- Improved performance with dual-ARM based firmware
- ATA S.M.A.R.T. Compliant
- ATA Automatic Acoustic Management Feature
- ATA 48-bit Address Feature
- ATA Device Configuration Overlay Feature
- NoiseGuard™
- SilentSeek™

DRIVE CONFIGURATION

Interface	Serial ATA 3.0Gbps
Buffer DRAM Size ²	16 / 32 MB
Byte per Sector	512 bytes

PERFORMANCE SPECIFICATIONS

Average Seek time (typical)	8.9 ms
Average Latency	5.56 ms
Data Transfer Rate	
Media to/from Buffer (Max.)	166 MB/sec
Buffer to/from Host (Max.)	300 MB/sec
Drive Ready Time (typical)	
500 GB	8 sec
1 TB	11 sec
1.5 TB	13 sec

RELIABILITY SPECIFICATIONS

Non-recoverable Read Error	1 sector in 10 ¹⁵ bits
Start/Stop Cycles	50,000

ACOUSTIC Noise

Idle		
500GB	2.2 Bel	
1~1.5TB	2.5 Bel	
Performance Seek		
500GB	2.7 Bel	
1~1.5TB	2.8 Bel	

POWER REQUIREMENTS

Voltage	+5V±5%, +12V±10%		
Capacity ¹	500GB	1 TB	1.5 TB
Spin-up Current (Max)	2.0A	2.0A	2.0A
Random Seek ³	4.8W	5.3W	5.7W
Read/Write	5.1W	5.8W	6.3W
Idle (typical)	3.9W	4.6W	5.1W
Standby (typical)	1W	1W	1W
Sleep (typical)	1W	1W	1W

ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating	0 ~ 60 °C
Non-operating	-40 ~ 70 °C
Humidity (non-condensing)	
Operating	5 ~ 90 %
Non-operating	5 ~ 95 %
Linear Shock (1/2 sine pulse)	
Operating (2.0ms)	70 G
Non-operating (2.0ms)	500GB ~ 1.5TB 300 G
Altitude (relative to sea level)	
Operating	-300 to 3,000 m
Non-operating	-300 to 12,000 m

PHYSICAL DIMENSION

Height (Max.)	26.1 mm
Width	101.5 mm
Length	147.0 mm
Weight (avg.)	
500GB	470 g
1TB	610 g
1.5TB	650 g

* Note : Design and specifications are subject to change without prior not

1.1MB = 1,000,000 Bytes, 1GB=1,000,000,000 Bytes

2. A small portion of the 16 / 32MB buffer memory is reserved for firmware use

3 Random seek with 30% duty cycle.(Average value)

